

What is claimed is:

1. A base station which continuously transmits control information to at least one communication terminal in an area in order to perform a communication control of the communication terminal, comprising:

5 a control information generating part for generating control information;
a communications part for continuously transmitting the control information generated by the control information generating part to the communication terminal in the area; and

10 a control information control part, in a certain case, for making the communication terminal in the area unable to recognize the control information by controlling at least one of the control information generating part and the communications part.

15 2. The base station of claim 1, wherein the control information control part performs an analysis of the communication control of the communication terminal in the area, and when a specific analysis result is obtained, makes the communication terminal in the area unable to recognize the control information by controlling at least one of the control information generating part and the communications part.

20 3. The base station of claim 1, wherein the base station is connected to a base station control apparatus, the communications part can receive a control instruction which instructs the control information control part to control the control information, from the base station control apparatus, and the control information control part, in a case of the communications part receiving the control instruction from the base 25 station control apparatus, makes the communication terminal in the area unable to recognize the control information, by controlling at least one of the control information generating part and the communications part.

30 4. The base station of claim 2, further comprising a communication channel setting part for managing at least one communication channel which can be set for the

communication terminal in the area, receiving a setting request for a communication channel from the communication terminal in the area which received the control information, and setting the communication channel for the communication terminal in the area having sent the setting request for the 5 communication channel,

wherein the control information control part analyzes a setting situation of the communication channel for the communication terminal in the area, and in a case of a number of vacant communication channels which are not set for the communication terminal in the area becoming equal to or less than a certain number, 10 makes the communication terminal in the area unable to recognize the control information, by controlling at least one of the control information generating part and the communications part.

5. The base station of claim 2, further comprising a communication channel setting 15 part for managing at least one communication channel which can be set for the communication terminal in the area, receiving a setting request for a communication channel from the communication terminal in the area which received the control information, and setting the communication channel for the communication terminal in the area having sent the setting request for the 20 communication channel,

wherein the control information control part analyzes communication traffic of another communication terminal in the area for which the communication channel has been set, and in a case of the communication traffic of the another communication terminal in the area for which the communication channel has been 25 set becoming equal to or greater than a specific level, makes the communication terminal in the area unable to recognize the control information, by controlling at least one of the control information generating part and the communications part.

6. The base station of claim 1, wherein the control information control part, in a 30 certain case, gives an instruction to the communications part to stop transmitting

the control information, and the communications part stops transmitting the control information to the communication terminal in the area, based on the instruction from the control information control part.

5 7. The base station of claim 1, wherein the control information control part, in a certain case, gives an instruction to the control information generating part to generate the control information by using a signal configuration which the communication terminal in the area can not recognize the control information, the control information generating part generates the control information by using the
10 signal configuration which the communication terminal in the area can not recognize the control information, based on the instruction from the control information control part, and the communications part transmits the control information generated by the control information generating part using the signal configuration which the communication terminal in the area can not recognize the
15 control information, to the communication terminal in the area.

8. The base station of claim 7, wherein the control information generating part generates the control information including a unique word, the control information control part, in a certain case, gives an instruction to the control information generating part to change at least a part of the unique word, and the control information generating part generates the control information by changing at least a part of the unique word, based on the instruction of the control information control part.

25 9. The base station of claim 7, wherein the control information generating part generates the control information having a certain frame length, the control information control part, in a certain case, gives an instruction to the control information generating part to change the frame length of the control information, and the control information generating part generates the control information by
30 changing the frame length, based on the instruction of the control information

control part.

10. The base station of claim 7, wherein the control information generating part generates the control information having a certain LCCH (Logical Control CHannel) 5 multi frame structure, the control information control part, in a certain case, gives an instruction to the control information generating part to change the LCCH multi frame structure, and the control information generating part generates the control information by changing the LCCH multi frame structure, based on the instruction of the control information control part.

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11. A base station which continuously transmits control information to at least one communication terminal in an area in order to perform a communication control of the communication terminal in the area, comprising:

15 a communications part for continuously transmitting the control information to the communication terminal in the area; and

a control information control part, in a certain case, for generating reception-stop-instruction information which instructs the communication terminal in the area to stop receiving the control information,

20 wherein the communications part transmits the reception-stop-instruction information generated by the control information control part to the communication terminal in the area.

25 12. The base station of claim 11, wherein the control information control part performs an analysis of the communication control of the communication terminal in the area, and in a case of obtaining a specific analysis result, generates the reception-stop-instruction information.

30 13. The base station of claim 11, wherein the base station is connected to a base station control apparatus, the communications part can receive a control instruction which instructs the control information control part to generate reception-stop-

instruction information, from the base station control apparatus, and the control information control part, in a case of the communications part receiving the control instruction from the base station control apparatus, generates the reception-stop-instruction information.

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14. The base station of claim 12, further comprising a communication channel setting part for managing at least one communication channel which can be set for the communication terminal in the area, receiving a setting request for a communication channel from the communication terminal in the area which received the control information, and setting the communication channel for the communication terminal in the area having sent the setting request for the communication channel,

wherein the control information control part analyzes a setting situation of the communication channel for the communication terminal in the area, and generates the reception-stop-instruction information in a case of a number of vacant communication channels which are not set for the communication terminal in the area becoming equal to or less than a certain number.

15. The base station of claim 12, further comprising a communication channel setting part for managing at least one communication channel which can be set for the communication terminal in the area, receiving a setting request for the communication channel from the communication terminal in the area which received the control information, and setting a communication channel for the communication terminal in the area having sent the setting request for the communication channel,

wherein the control information control part analyzes communication traffic of another communication terminal in the area for which the communication channel has been set, and in a case of the communication traffic of the another communication terminal in the area for which the communication channel has been set becoming equal to or greater than a specific level, generates the reception-stop-

instruction information.

16. The base station of claim 11, wherein the base station transmits the control information to a plurality of communication terminals in the areas, and the 5 communications part, in a case of the control information control part generating the reception-stop-instruction information, transmits the reception-stop-instruction information to a specific communication terminal in the area, and makes the reception-stop-instruction information transmitted from the specific communication terminal in the area to another communication terminal in the area one by one.

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17. A communication system comprising:

a first base station for managing a communication-terminal-in-first-area which exists in a first area, holding a communication channel which can be set for the communication-terminal-in-first-area, and setting the communication channel for 15 the communication-terminal-in-first-area by receiving a setting request for the communication channel from the communication-terminal-in-first-area; and

a second base station for managing a communication-terminal-in-second-area which exists in a second area,

wherein the first base station, in a certain case, stops receiving the setting 20 request for the communication channel from the communication-terminal-in-first-area, generates notification information which notifies that receiving the setting request for the communication channel has been stopped, and transmits the notification information generated by the first base station to the second base station, and the second base station receives the notification information transmitted from 25 the first base station and transmits the notification information received to the communication-terminal-in-second-area.

18. The communication system of claim 17, wherein the first base station is connected to the second base station through a base station control apparatus, and 30 in a case of generating the notification information, transmits the notification

information to the second base station through the base station control apparatus.

19. The communication system of claim 17, wherein the first base station is connected to a first base station control apparatus and the second base station is connected to a second base station control apparatus which is connected to the first base station control apparatus, and the first base station, in a case of generating the notification information, transmits the notification information to the second base station through the first base station control apparatus and the second base station control apparatus.

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20. The communication system of claim 17, wherein the second base station can communicate with a base station other than the first base station, and in a case of receiving the notification information transmitted from the first base station, transmits the notification information received to the base stations other than the first base station.

21. A base station control apparatus which is connected to a plurality of base stations and controls the plurality of base stations, wherein each of the plurality of base stations has a management area as a management object, holds a communication channel which can be set for a communication terminal in its management area, and when receiving a setting request for the communication channel from the communication terminal in its management area, sets the communication channel for the communication terminal in its management area,

wherein the base station control apparatus, in a case of a specific base station having stopped receiving the setting request for the communication channel, detects that the specific base station has stopped receiving the setting request for the communication channel, generates notification information which notifies that the specific base station has stopped receiving the setting request for the communication channel, transmits generated notification information to a base station other than the specific base station, and makes the base station other than the specific base

station transmit the generated notification information to the communication terminal in its management area.

22. The base station control apparatus of claim 21, wherein the base station control apparatus is connected to another base station control apparatuses which controls at least one base station, and in the case of generating the notification information, transmits a generated notification information to the another base station control apparatuses, and makes the another base station control apparatuses transmit the generated notification information to a base station which the another base station control apparatuses controls.

23. The base station control apparatus of claim 21, wherein the base station control apparatus is connected to another base station control apparatus which controls at least one base station which sets the communication channel for a communication terminal when receiving a setting request for the communication channel from the communication terminal, and

wherein the base station control apparatus, when one base station which is controlled by the another base station control apparatus stops receiving the setting request for the communication channel, receives notification information from the another base station control apparatus which notifies that the one base station which is controlled by the another base station control apparatus has stopped receiving the setting request for the communication channel, transmits a received notification information to the plurality of base stations, and makes the plurality of base stations transmit the received notification information to the communication terminal in the management area of each base station.